

Ethanolamines/Glycol Ethers Tier 3 Procedure

Section Number: 1116
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Original Date: 10-26-91 **Author:** Mike Viator
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Title: Oxide Spill At D-101 Or D-101A
References: Glossary Of Equipment Identification (Text # 114)

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1116. Oxide Spill At D-101 or D-101A

1.0 Objective:

1.1 To provide a guide to the actions that should be used to minimize the effects of an oxide spill on the plant and the environment.

2.0 Responsibility:

2.1 It is the responsibility of the operations supervisor and the senior operations specialist to ensure that this procedure is understood and used in a safe and efficient manner.

2.2 It is the responsibility of the senior operations specialist and The operations specialist to understand and use these guidelines in a safe and efficient manner.

3.0 Special Notations:

3.1 Emergency procedures are written with the intention of having in black and white what procedure should be followed under ideal circumstances. They do not take the place of common sense. If there is a fire, we have a fire department to handle it. Don't tackle something that could injure you because you don't have the experience or training to handle it. Small fires in trash cans or some insulation fires can be handled by most of us. Don't wind up making the problem worst by getting hurt or rushing in and doing the wrong thing. The same thing applies spills and other emergencies.

-----use common sense-----

3.2 If sprinkler system and deluge guns do not knock down all the ethylene oxide vapors, it may be necessary to shutdown all pump immediately.

3.3 In the investigation of and the isolation of the spill, personnel should try to avoid walking across the spill or coming in contact with EO Vapors. EO Is a known carcinogen.

4.0 Simulated Conditions:

4.1 Wind is out of the southwest at 10 miles per hour.

4.2 Blown gasket on bottom flange of D-101.

- 4.3 Leak cannot be isolated.
- 4.4 Both plants are using ethylene oxide.
- 5.0 Board Person:**
- 5.1 Trip TS-1036 "utility board" incoming oxide.
- 5.2 Trip the ethanolamines reactor system sprinkler system.
- 5.3 Energize spill alarm and announce spill. Stop all hot work.
- 5.4 Call 333, give type of spill and location if lead senior operations specialist has not already done so.
- 5.5 Close oxide valves (feed to reactors and recirculation valves).
- 5.6 Shutdown air handlers for building 5501.
- 5.7 Call Glycol II and have them block in the ethylene oxide to us manually.
- 5.8 If available begin re-running DV-113 to T-110 and back to DV-113.
- 5.9 Shutdown glycol ethers finishing end and trim feed to T-250 to keep the ethanolamines finishing end running.
- 5.10 Shut off anhydrous ammonia flow to D-210, catalyst flow to R-101, acid flow to T-110 feed.
- 5.11 Depending on complications of leak and repairing of leak, the ethanolamines finishing end may need to be shutdown.
- 5.12 Coordinate activities of outside people.
- 6.0 Lab Person and Outside Operator:**
- 6.1 Put on a Scott air pak, get emergency and block radios, inspect spill location (if possible) and call plant security to inform them of the spill, location, etc.
- 6.2 Direct ethanolamines and glycol ethers shutdown as determined necessary.
- 6.3 Coordinate a safe shutdown.
- 6.4 Call plant superintendent as time permits.
- 6.5 Get a block radio.
- 6.6 Put on a Scott air pak.

- 6.7 Put deluge guns on spill, verify that area two sump valve is closed.
- 6.8 If possible, block incoming oxide valve manually.
- 6.9 Block in oxide valves at reactors and recirculation control loops:
- 6.10 Swap T-110 bottoms to DV-113 and T-240 bottoms to DV-243A. (as time permits)
- 6.11 Call board person or lead operator for further instructions.
- 6.12 Block area 8 gate valve.
- 6.13 Direct security to spill area if personnel are available. If not, assist other operations specialist.

7.0 Revisions

Revision No. 1	06-30-92	Changed section 1116.1.1 to reflect environmental concerns.
Revision No. 2	07-14-93	Yearly Review
Revision No. 3	12-22-94	Yearly Review
Revision No. 4	1-23-96	Changed Titles
Revision No. 5	11-14-96	Combined Section 5.0 with Section 7.0 and renumbered.